Appl. No. 10/591,060 Amendment dated July 14, 2010 Reply to Office Action of March 18, 2010

REMARKS

In the March 18, 2010 final Office Action, claims 2, 4 and 9-18 stand rejected in view of prior art. No other objections or rejections were made in the Office Action. Claims 3, 5-8 and 19-39 are also pending, but withdrawn from consideration.

Status of Claims and Amendments

In response to the March 18, 2010 final Office Action and the June 30, 2010 Advisory Office Action, Applicants have amended claim 2. Claims 3, 5-8 and 19-38 are withdrawn from further consideration as being drawn to non-elected Species. Thus, claims 2-38 are pending, with claims 2 and 3 now being the only independent claims. Claims 2, 4 and 9-18 (claim 2 being independent) are currently being examined on merits. Reexamination and reconsideration of the pending claims 2, 4 and 9-18 are respectfully requested in view of above amendments and the following comments.

Rejections - 35 U.S.C. § 103

In paragraphs 2-7 of the Office Action, claims 2, 4 and 9-18 stand rejected under 35 U.S.C. §103(a) as follows:

- (A) Claims 2, 4, 12 and 13 stand rejected as being unpatentable (obvious) over the Rhodes '143 patent;
- (B) Claims 9-11 stand rejected as being unpatentable (obvious) over the Rhodes '143 patent in view of U.S. Patent No. 4,984,433 to Worthington;
- (C) Claim 14 stands rejected as being unpatentable (obvious) over the Rhodes '143 patent in view of U.S. Patent No. 6,205,797 to Maeda and U.S. Patent No. 6,050,100 to Belding;
- (D) Claim 15 stands rejected as being unpatentable (obvious) over the Rhodes '143 patent in view of U.S. Patent No. 6,205,797 to Maeda;
- (E) Claims 16 and 17 stand rejected as being unpatentable (obvious) over the Rhodes '143 patent in view of U.S. Patent No. 5,547,018 to Takahashi et al.; and
- (F) Claim 18 stands rejected as being unpatentable (obvious) over the Rhodes '143 patent in view of U.S. Patent No5,590,831 to Manson et al.

In response, Applicants have Amended independent claim 2 to require, *inter alia*, <u>the compression mechanism and the heat source side heat exchanger of the heat source side refrigerant circuit being arranged in the air conditioning system such that</u>

only the compression mechanism of the compression mechanism and the heat source side heat exchanger being used in common with the first and second utilization side refrigerant circuits,

the heat source side heat exchanger operating as a condenser of the refrigerant discharged from the compression mechanism when the air heat exchangers operate as evaporators of the refrigerant, and

the heat source side heat exchanger operating as an evaporator of the refrigerant condensed in the air heat exchanger when the air heat exchangers operate as condensers of the refrigerant discharged from the compression mechanism,.

Applicants believe these arrangements are **not** disclosed or suggested by the Rhodes patent, the Worthington patent, the Maeda patent, the Belding patent, the Takahashi et al. patent, and/or the Manson et al. patent, singularly or in combination, as explained below. The claims rejected in rejections (B) - (F) all now depend from independent claim 2. Thus, the following remarks will focus primarily on rejection (A), which is the foundation of all the rejections of the final Office Action.

With respect to rejection (A), the Office Action acknowledges that the Rhodes patent fails to explicitly teach a heat source side heat exchanger in the heat source side refrigerant circuit. However, the Office Action asserts that it is obvious to replace the accumulator (96) of the Rhodes patent with a heat exchanger in order to allegedly ensure that mixed phase refrigerant is in the liquid phase before being sent to the inlet of the compressor.

However, if the accumulator (96) of the Rhodes patent is replaced with a heat exchanger, the heat exchanger would be used in common with the first and the second utilization side refrigerant circuits. Moreover, in the circuit of the Rhodes patent, if the accumulator (96) of the Rhodes patent is replaced with a heat exchanger, the heat exchanger would *not* be arranged in the system to operate as a condenser of the refrigerant discharged from the compression mechanism when the air heat exchangers operate as evaporators of the refrigerant, and operate as an evaporator of the refrigerant condensed in the air heat

exchanger when the air heat exchangers operate as condensers of the refrigerant discharged from the compression mechanism. Rather, if the accumulator (96) of the Rhodes patent is replaced with a heat exchanger as asserted in the final Office Action, such a heat exchanger would be arranged so that it is not capable of operating as claimed due to the location (arrangement) of the accumulator (96) relative to the compressor (85) and the switching valve (87). See Figure 9 of the Rhodes patent. In other words, the heat source side heat exchanger of claim 2 is a heat exchanger that functions at least as a *condenser* of the refrigerant. On the other hand, because the Office Action asserts the purpose of modification is to prevent compressor damage due to the liquid refrigerant, a heat exchanger replacing the accumulator (96) is only capable of being an evaporator of the refrigerant, not a condenser of the refrigerant. Thus, if the accumulator (96) of the Rhodes patent is replaced with a heat exchanger as suggested in the Office Action, the arrangement of independent claim 2 as now amended would not result. Accordingly withdrawal of rejection (A) of claims 2, 4, 12 and 13 is respectfully requested.

The remaining references cited in rejections (B) - (F) do not account for the deficiencies of the Rhodes patent with respect to independent claim 2. In fact, as seen in the Office Action, these references are merely relied upon to allegedly disclose features of selected dependent claims. Thus, even if the references cited in rejections (B) - (F) were somehow combined with the Rhodes patent as asserted in the Office Action, the compression mechanism and the heat source side heat exchanger of the heat source side refrigerant circuit arranged in the air conditioning system as required by independent claim 2 would not result. Accordingly, withdrawal of rejections (B) - (F) is also respectfully requested.

Under U.S. patent law, the mere fact that the prior art can be modified does *not* make the modification obvious, unless an *apparent reason* exists based on evidence in the record or scientific reasoning for one of ordinary skill in the art to make the modification. See, KSR Int'l Co. v. Teleflex Inc., 127 S.Ct. 1727, 1741 (2007). The KSR Court noted that obviousness cannot be proven merely by showing that the elements of a claimed device were known in the prior art; it must be shown that those of ordinary skill in the art would have had some "apparent reason to combine the known elements in the fashion claimed." Id. at 1741. In this case, the current record lacks any apparent reason, suggestion or expectation of

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success for combining the patents to create Applicants' unique arrangement of independent claim 2, as now amended.

In view of the comments, Applicants respectfully assert that claims 2, 4 and 9-18 are now in condition for allowance. Furthermore, Applicants respectfully request that withdrawn claims 3, 5-8 and 19-38 be rejoined if appropriate, upon allowance of a generic and/or linking claim or claims. In any case, reexamination and reconsideration of the pending claims are respectfully requested.

Respectfully submitted,

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